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EXAMINER

YAGER, JAMES C

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,261	Applicant(s) ULLMANN, BERND	
	Examiner JAMES YAGER	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20051020 & 20060227</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "said body"; "said opening"; "the environment of the insert"; "said floating body"; "said small opening"; "said ventilation opening"; "said external environment of the insert"; and "said minimum volume" in lines 2, 6, 7, 9, 11, 13, 14 and 15 respectively. There is insufficient antecedent basis for these limitations in the claim.

Regarding claim 1, the phrase "reduced diameter" renders the claim indefinite because it is unclear to what the diameter is being compared to be considered reduced and how small the diameter must be to be considered reduced.

Regarding claim 1, the phrase "which connects this cavity with the environment of the insert" renders the claim indefinite because it is not clear what is considered to be the environment of the insert, does this refer to the environment inside the insert or outside around the insert?

Regarding claim 1, the phrase “said small opening” renders the claim indefinite because it is unclear how small the opening must be to be considered small.

Regarding claim 1, the phrase “when it is filled with liquid” renders the claim indefinite because it is unclear what is being filled with liquid, the container, the insert or the volume.

Regarding claim 1, the phrase “minimum volume” renders the claim indefinite, because it is unclear what is meant by this phrase.

Regarding claim 1, the phrase “cavity in conjunction with a positioning device” renders the claim indefinite because it is not clear if the cavity is part of the positioning device, or a separate cavity.

Claim 3 recites the limitation “said, upwardly open or of a said, upwardly at least partially covered boat” in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitations “said bottom” and “said circumferential side wall” in lines 2 and 3 respectively. There is insufficient antecedent basis for these limitations in the claim.

Regarding claims 3 and 4, claim 3 recites that the floating body has the shape of a boat. It is unclear what is meant by this since boats can be in many different shapes.

Regarding claims 3 and 4, these claims refer to the position of the body that can be activated by pressure in relation to the “boat”. This renders the claim indefinite because the claim does not recite a “boat”, but recites a floating body in the shape of a boat.

Claim 6 recites the limitation "its upper area" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 6, the phrase "its upper area" renders the claim indefinite because it is unclear what is meant by this phrase.

Claim 7 recites the limitations "said first cavity"; "its upper area" and "said second cavity" in lines 3 and 4 respectively. There is insufficient antecedent basis for these limitations in the claim.

Regarding claim 7, the phrase "its upper area" renders the claim indefinite because it is unclear what is meant by this phrase.

Regarding claim 7, the phrase "relatively weak forces" renders the claim indefinite because it is unclear what forces are encompassed by this phrase.

Regarding claim 7, the phrase "opened by relatively weak forces in a gas- and liquid-tight manner" renders the claim indefinite because it is unclear what is meant by this phrase.

Regarding claim 8, the phrase "which completely surrounds the said second cavity on the side" renders the claim indefinite because it is unclear whether the wall completely surrounds the cavity or only surrounds the sides of the cavity.

Claim 9 recites the limitation "said axis (x)" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 9, the phrase "or a shape derived therefrom" renders the claim indefinite because it is unclear what shapes are encompassed by this phrase.

Regarding claim 14, the phrase "composed exclusively of" renders the claim indefinite. Is this open or closed language? If it is closed language, it is not clear what happens to the other limitations of claim 1. Are those limitations present in claim 14 given that claim 14 depends from claim 1?

Claim 14 recites the limitations "said bottom part"; "said cover part" and "said weight" in line 3. There is insufficient antecedent basis for these limitations in the claim.

Regarding claim 15, the phrase "weak bonded connections" renders the claim indefinite because it is unclear what connections are encompassed by this phrase.

Claim 16 recites the limitation "said two parts" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 21, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 21

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recites the broad recitation "foaming beverage", and the claim also recites "beer" which is the narrower statement of the range/limitation.

Regarding claim 22, the claim is indefinite because it is unclear whether it depends only on claim 7 or on claim 7 and claims that depend of claim 7. It is also unclear what claims are referred to by stating "or a claim that depends on that claim". It is advised that the actual claim numbers are inserted into the claim

Regarding claim 25, the phrase "a minor nutrient" renders the claim indefinite because it is unclear what is meant by this phrase.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, 6, 11-14, 16 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Houzego et al. (WO 95/04688).

Regarding claims 1, 2, 5, 6, 11-14, 16 and 18-21, Houzego discloses a head generating device for use in a sealed and pressurized container which is partially filled with liquid (i.e. insert for being added to a gas-pressurized liquid in a liquid container), comprising a hollow capsule having a ballast means such that the capsule will float of the liquid wherein liquid can enter the uppermost compartment (i.e. positioning device

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comprising a floating body) (Page 2, Para 6 – Page 3, Para 2), and having a lower compartment (i.e. body that can be activated by pressure has at least one cavity) (Page 11, Para 1, Fig. 1).

Given that the interior of the capsule is pressurized by gas in the headspace and exits the capsule when the container is opened and the pressure in the container drops, it is the examiner's position that the lower compartment can be activated by pressure (Page 1, Para 2). Houzego further discloses that the lower compartment has a small opening (top of tube 21, Fig. 1) which connects the cavity with the upper compartment (i.e. environment of the insert) which is located above the level of the liquid when the capsule is floating on the liquid (i.e. opening with reduced diameter which connects this cavity with the environment of the insert and is located at a location that is above the level of the liquid when the insert is floating on the liquid) (Fig. 1).

Given the confusion regarding the phrase "environment of the insert", see paragraph 2, in this case, the examiner is interpreting environment of the insert to mean the environment inside the insert.

Houzego further discloses wherein the upper compartment (i.e. positioning device comprising a floating body) has a small opening 16 that is submerged in the liquid when the capsule is placed on a liquid (a small opening that is submerged in the liquid when the insert is placed on a liquid) and an opening 23 (i.e. a ventilation opening which directly communicates with the external environment of the insert) (Fig.1), wherein the upper compartment fills with liquid, when the upper compartment is half full, the buoyancy of the capsule is reduced such that it will no longer float (i.e. minimum

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volume which ensures that the insert will sink into the liquid when it is filled with liquid) (Page 11, Para 2).

It is the examiners position that given that the upper and lower compartments are adjacent to each other , the upper compartment (floating body) is arranged outside the lower compartment (body that can be activated by pressure).

Given that the lower compartment (body that can be activated by pressure) is attached to the bottom of the upper compartment (floating body), it is the examiners position that the bottom of the lower compartment (body that can be activated by pressure) and the bottom of the upper compartment (floating body) form an integral unit.

Given that the lower compartment (body that can be activated by pressure) has only one cavity and only one small opening (top of tube 21, Fig. 1) at the top of the lower compartment which connects the cavity with the upper compartment (i.e. environment of the insert), it is the examiner's position that the capsule meets the limitations of claim 6.

Given that the upper and lower compartments are roughly shaped like half spheres that are aligned to create a spherical capsule, it is the examiners position that they are designed as rotationally symmetrical bodies in relation to an axis.

Houzego discloses that the capsule comprises a weight whose mass is selected appropriately so that when the upper compartment is half full, the buoyancy of the capsule is reduced such that it will no longer float (i.e. body that can be activated by pressure additionally has a weight) (Page 11, Para 2, Fig. 1, 17).

Given that the weight is attached to the structure of the capsule, it is the examiners position that the weight is an integral part of the body that can be activated by pressure.

Regarding claims 14 and 16, Although there is confusion with respect to the phrase "composed exclusively of", see paragraph 2 above, it is noted that the reference teaches a lower compartment having a bottom (i.e. bottom part) and an upper compartment having a top (i.e. cover part) and a weight (Fig. 1). Given that the shell of the capsule (Fig. 1, 14) comprises the walls of the upper and lower compartments, it is the examiner's position that the bottom and top (i.e. two parts) are connected to one another via their side walls.

Given that the mass of the weight is selected so that when the upper compartment is half full, the buoyancy of the capsule is reduced such that it will no longer float (Page 11, Para 2), it is the examiner's position that the weight is inherently made of a material with a specific gravity of >1 .

Regarding claims 19-21, Houzego discloses that the interior of the capsule is pressurized by gas in the headspace and exits the capsule when the container is opened and the pressure in the container drops, creating a head on the beverage (i.e. use of an insert to improve the formation of gas bubbles in a liquid which is sealed in a container under pressure, during the opening of the container characterized in that the insert is introduced into the container before or after the open container is filled with liquid, and the liquid container is sealed, such that an overpressure develops compared to the ambient pressure within the liquid container after the sealing) (Page 1, Para 2).

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Houzego discloses that the headspace contains pressurized nitrogen gas (i.e. wherein pressure which causes said overpressure to develop within the liquid container after sealing, is admitted to the gas space above the liquid in the liquid container) (Page 10, Para 1). Houzego discloses that the capsule can be used in the production of head on a beer (i.e. wherein the liquid is a foaming beverage and especially beer) (Page 1, Para 1).

5. Claims 1, 2, 5, 6, 11-14, 16 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nash et al. (US 5,714,186).

Regarding claims 1, 2, 5, 6, 11-14 and 18-21, Nash discloses a head generating device comprising a capsule with two compartments (i.e. insert for being added to a gas-pressurized liquid in a liquid container) (Fig. 1, 14 and 16), wherein the first compartment (Fig. 1, 14) will pressurize (i.e. body that can be activated by pressure and has at least one cavity) (C5/L59-67) and beer will enter the second compartment (i.e. positioning device comprising a floating body) (C6/L1-6; Fig. 1, 16), wherein the first compartment has a small opening which is above the level of the liquid (i.e. at least one opening with a reduced diameter, which connects this cavity with the environment of the insert and is located in a location that is above the level of the liquid when the insert is floating of the liquid) (Fig. 2, top of tube 20), wherein the second compartment has a small opening (i.e. a small opening that is submerged in the liquid when the insert is placed in the liquid) (Fig 1 and 2, 28) and an additional opening (ventilation opening, which directly communicates with the external environment of the insert) (Fig. 2, 30) and

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a compartment (minimum volume which ensures that the insert will sink when it is filled with liquid) (Fig. 1, 16).

Given the confusion regarding the phrase “environment of the insert”, see paragraph 2, in this case, the examiner is interpreting environment of the insert to mean the environment around the insert.

It is the examiners position that given that the first and second compartments are adjacent to each other, the second compartment (floating body) (Fig. 1, 16) is arranged outside the first compartment (body that can be activated by pressure) (Fig. 1, 14).

Given that the shell of the capsule comprises the bottoms of both the first and second compartments, it is the examiners position that the bottom of the body that can be activated by pressure and the bottom of the floating body form an integral unit.

Given that the first compartment (body that can be activated by pressure) has only one cavity and only one small opening (top of tube 20, Fig. 2) at the top of the first compartment, it is the examiner's position that the capsule meets the limitations of claim 6.

Given that the first and second compartments are roughly shaped like half cylinders or half spheres that are aligned to create a cylindrical or spherical capsule (C5/L9-14), it is the examiners position that they are designed as rotationally symmetrical bodies in relation to an axis.

Nash further discloses a weight which may be affixed to the interior of the cylinder (i.e. characterized in that said body that can be activated by pressure

additionally has a weight; wherein the weight is an integral part of the said body that can be activated by pressure) (C6/L22-26; Fig. 2, 34).

Regarding claims 14 and 16, Although there is confusion with respect to the phrase “composed exclusively of”, see paragraph 2 above, it is noted that the reference teaches a sphere or cylinder having a bottom (i.e. bottom part) and having a top (i.e. cover part) and a weight (Fig. 1 and 2). Given that the shell of the capsule (Fig. 1 and 2, 10) comprises the walls of the first and second compartments, it is the examiner's position that the bottom and top (i.e. two parts) are connected to one another via their side walls.

Given that the combined effect of the weight and the beer in the second compartment can cause the capsule to submerge (C6/L22-26), it is the examiner's position that the weight is inherently made of a material with a specific gravity of >1 .

Regarding claims 19-21, Nash discloses that the capsules are inserted in containers the can is dosed with liquid nitrogen and the lid is affixed and sealed, the cans have been previously filled with beverage (C6/L39-45; C7/L23-26), the capsule is used to create a head on a beverage such as beer (C1/L4-7), the interior of the capsule will be pressurized by gas in the headspace above the liquid and the trapped gas is able to exit the capsule when the container is opened and the pressure in the container drops (C2/L26-33) (i.e. use of an insert to improve the formation of gas bubbles in a liquid, during the opening of the container, characterized in that the insert is introduced into the container after the open container is filled with the liquid and the liquid container is sealed, such that an overpressure develops compared to the ambient pressure within

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the liquid container after sealing; wherein pressure which causes the overpressure to develop within the liquid contain container sealing, is admitted to the gas space above the liquid in the liquid container; wherein the liquid is a foaming beverage and especially beer)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 3, 4 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Houzego et al. (WO 95/04688) as applied to claim 1 above.

Regarding claims 3, 4 and 10, It is the examiners position that given that the upper compartment has a covered top part, the upper compartment has the shape of an upwardly at least partially covered boat, and that the upper compartment (floating body)

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comprises a bottom and a circumferential sidewall (Fig. 1). It is also the examiner's position that given that the upper and lower compartments comprise half spheres adjacent to each other forming the shape of a sphere, that the lower compartment (body that can be activated by pressure) is arranged centrally to the floating body.

Houzege does not disclose that the body that can be activated by pressure is arranged within the floating body or that the body that can be activated by pressure is arranged on the bottom of the floating body or that the body that can be activated by pressure is arranged in the floating body.

However, since it has been held that rearranging parts of an invention involves only routine skill in the art while the device having the claimed dimensions would not perform differently than the prior art device, In re Japikse, 86 USPQ 70, it is the examiner's position that it would have been obvious to arrange the body that can be activated by pressure in or within the floating body and on the bottom of the floating body and the capsule would not perform differently.

9. Claims 3, 4 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Houzege et al. (WO 95/04688) as applied to claim 1 above, in further view of Grieshaber et al. (US 1,567,050).

Regarding claims 3, 4 and 10, It is the examiners position that given that the upper compartment has a covered top part, the upper compartment has the shape of an upwardly at least partially covered boat, and that the upper compartment (floating body) comprises a bottom and a circumferential sidewall (Fig. 1). It is also the examiner's position that given that the upper and lower compartments comprise half spheres

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adjacent to each other forming the shape of a sphere, that the lower compartment (body that can be activated by pressure) is arranged centrally to the floating body. It is the examiner's position that given that the lower compartment (body that can be activated by pressure) is located on the bottom of the upper compartment (floating body), that the lower compartment is arranged on the bottom of the upper compartment.

Houzego does not disclose that the body that can be activated by pressure is arranged within the floating body or that the body that can be activated by pressure is arranged in the floating body.

Grieshaber discloses that conventionally submarines have ballast tanks along the hull, and are positioned around the outside of the inner compartment as shown in figure 1 (P1/L18-29, Fig. 1).

Houzego and Grieshaber are analogous art because they both teach about structures that float on and submerge in liquids. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the design of Greishaber regarding the placement of the lower compartment in or within the upper compartment in the capsule of Houzego because that is the conventional design used in submersible devices and to provide increased stability to the structure.

10. Claims 7-9 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houzego et al. (WO 95/04688), in view of Reichinger (WO 99/54229).

Regarding claims 7-9 and 22-25, Houzego discloses all of the claim limitations as set forth above. It is the examiner's position that the cavity of the lower compartment

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(body activated by pressure) is the first cavity and the small opening (top of tube 21, Fig. 1) is the opening with reduced diameter arranged in its upper area.

Houzege does not disclose a second cavity which is intended to accommodate a solid or liquid substance and is separated from the first cavity by a wall that can be opened by relatively weak forces in a gas- and liquid-tight manner, or that the partition between the two said cavities is a circumferential wall which completely surrounds the said second cavity on the side or that the second cavity has the shape of a cylinder or another shape that is rotationally symmetrical in relation to said axis (x), and the said first cavity has the shape of a cylindrical sleeve or a shape derived therefrom.

Reichinger discloses a two compartment container for use in a beverage container wherein two products remain separate until the moment the customer wishes to consume the mixture which ensures that the mixture is fresh (Page 1, Para 1), comprising a compartment filled with flavor (i.e. a second cavity intended to accommodate a liquid substance separated from the first cavity), comprising an inner side wall separates that flavor containing compartment preventing gas or fluid from escaping (gas- and liquid-tight manner), and a weak closure means between the inner sidewall and the opposite part of the two compartment container so that upon opening, the inner sidewall is released and the flavor can escape (separated from the first cavity by a wall that can be opened by relatively weak forces; the partition between the two said cavities is a circumferential wall which completely surrounds the said second cavity on the side) (Page 4, Para 2, Fig, 1a and 1b). It is clear from figures 1a and 1b that the inner sidewall is in the shape of a cylinder and the outer sidewall is in the shape of a

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cylindrical sleeve surrounding the inner sidewall (the second cavity has the shape of a cylinder or another shape that is rotationally symmetrical in relation to said axis (x), and the said first cavity has the shape of a cylindrical sleeve or a shape derived therefrom) (Fig. 1a, 1b).

Houzego and Reichinger are analogous art because they both teach about capsules which are activated by pressure located in beverage cans. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the compartment filled with flavor and the inner sidewall of Reichinger into the lower compartment of the capsule of Houzego to provide a capsule with the advantage of being able to provide a flavor to the beverage wherein two products remain separate until the moment the customer wishes to consume the mixture which ensures that the mixture is fresh.

Given that Houzego discloses that the interior of the capsule is pressurized by gas in the headspace and exits the capsule when the container is opened and the pressure in the container drops, creating a head on the beverage (Page 1, Para 2) and given that Reichinger discloses that his capsule is precharged to a pressure above atmospheric and inserted into the container and the container is filled with a liquid (Page 2, Para3), it is the examiner's position that modified Houzego discloses use of the capsule wherein the second cavity is filled with the liquid substance, the open container is filled with liquid, the capsule insert is introduced into the container before the liquid is filled into the container and the liquid container is sealed such that overpressure develops compared to the ambient pressure after the liquid container is sealed.

Given that Houzego discloses that the headspace contains pressurized nitrogen gas (i.e. wherein pressure which causes said overpressure to develop within the liquid container after sealing, is admitted to the gas space above the liquid in the liquid container) (Page 10, Para 1), it is the examiner's position that the pressure which causes the overpressure to develop within the liquid container after sealing, is admitted into the gas space above the liquid in the liquid container.

Given that the liquid in modified Houzego is beer (carbonated beverage) (Page 1, Para 1) and the substance stored in modified Houzego is a flavor compound, it is the examiner's position that the liquid is beer and the substance stored separately is an aroma compound. Houzego further discloses that the headspace can be dosed with liquid nitrogen (i.e. filled with the addition of liquid nitrogen) (Page 15, Para 6).

11. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houzego et al. (WO 95/04688), in view of Wright et al. (US 5,705,209).

Regarding claims 15 and 17, Houzego discloses all of the claim limitations as set forth above. It is noted that the reference teaches a lower compartment having a bottom (i.e. bottom part) and an upper compartment having a top (i.e. cover part) and a weight (Fig. 1). Given that the top and bottom of the capsule of Houzego are a cover part and a bottom part, it is the examiner's position that the cover part and bottom part comprise all said sidewalls (i.e. at least one of said cover part and said bottom part has all the said sidewalls of the insert).

Houzego does not disclose that the bottom part and the top part are connected to one another via snap connections, frictionally engaged connections or weak bonded

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connections or that the top and bottom of the capsule snappingly engage each other or extend around structures arranged there during connection.

Wright discloses an insert for a beverage container (C3/L5-10) having a top part and a bottom part which snappingly engage each other (Fig. 4).

Houzego and Wright are analogous art because they both teach about inserts for a beverage container. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the snapping engagement design to connect the top and bottom portion of the capsule of Houzego to provide a capsule that can be opened and closed easily so that components (such as the weight) can be easily placed inside the capsule.

12. Claims 3, 4 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Nash et al. (US 5,714,186) as applied to claim 1 above.

Regarding claims 3, 4 and 10, It is the examiners position that given that the second compartment has a covered top part, the second compartment has the shape of an upwardly at least partially covered boat, and that the second compartment (floating body) comprises a bottom and a circumferential sidewall (Fig. 1 and 2). It is also the examiner's position that given that the first and second compartments comprise half spheres or half cylinders adjacent to each other forming the shape of a sphere or a cylinder, that the first compartment (body that can be activated by pressure) is arranged centrically to the floating body.

Nash does not disclose that the body that can be activated by pressure is arranged within the floating body or that the body that can be activated by pressure is

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arranged on the bottom of the floating body or that the body that can be activated by pressure is arranged in the floating body.

However, since it has been held that rearranging parts of an invention involves only routine skill in the art while the device having the claimed dimensions would not perform differently than the prior art device, In re Japikse, 86 USPQ 70, it is the examiner's position that it would have been obvious to arrange the body that can be activated by pressure in or within the floating body and on the bottom of the floating body and the capsule would not perform differently.

13. Claims 3, 4 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Nash et al. (US 5,714,186) as applied to claim 1 above, in further view of Grieshaber et al. (US 1,567,050).

Regarding claims 3, 4 and 10, It is the examiners position that given that the second compartment has a covered top part, the second compartment has the shape of an upwardly at least partially covered boat, and that the second compartment (floating body) comprises a bottom and a circumferential sidewall (Fig. 1 and 2). It is also the examiner's position that given that the first and second compartments comprise half spheres or half cylinders adjacent to each other forming the shape of a sphere or a cylinder, that the first compartment (body that can be activated by pressure) is arranged centrically to the floating body. It is the examiner's position that given that the bottom of the first compartment (body that can be activated by pressure) is arranged adjacent to the bottom of the second compartment (floating body), that the first compartment is arranged on the bottom of the second compartment.

Nash does not disclose that the body that can be activated by pressure is arranged within the floating body or that the body that can be activated by pressure is arranged in the floating body.

Grieshaber discloses that conventionally submarines have ballast tanks along the hull, and are positioned around the outside of the inner compartment as shown in figure 1 (P1/L18-29, Fig. 1).

Nash and Grieshaber are analogous art because they both teach about structures that float on and submerge in liquids. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the design of Greishaber regarding the placement of the first compartment in or within the second compartment in the capsule of Nash because that is the conventional design used in submersible devices and to provide increased stability to the structure.

14. Claims 7-9 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nash et al. (US 5,714,186), in view of Reichinger (WO 99/54229).

Regarding claims 7-9 and 22-25, Nash discloses all of the claim limitations as set forth above. It is the examiner's position that the cavity of the first compartment is the first cavity and the small opening (top of tube 20, Fig. 2) is the opening with reduced diameter arranged in its upper area.

Nash does not disclose a second cavity which is intended to accommodate a solid or liquid substance and is separated from the first cavity by a wall that can be opened by relatively weak forces in a gas- and liquid-tight manner, or that the partition between the two said cavities is a circumferential wall which completely surrounds the

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said second cavity on the side or that the second cavity has the shape of a cylinder or another shape that is rotationally symmetrical in relation to said axis (x), and the said first cavity has the shape of a cylindrical sleeve or a shape derived therefrom.

Reichinger discloses a two compartment container for use in a beverage container wherein two products remain separate until the moment the customer wishes to consume the mixture which ensures that the mixture is fresh (Page 1, Para 1), comprising a compartment filled with flavor (i.e. a second cavity intended to accommodate a liquid substance separated from the first cavity), comprising an inner side wall separates that flavor containing compartment preventing gas or fluid from escaping (gas- and liquid-tight manner), and a weak closure means between the inner sidewall and the opposite part of the two compartment container so that upon opening, the inner sidewall is released and the flavor can escape (separated from the first cavity by a wall that can be opened by relatively weak forces; the partition between the two said cavities is a circumferential wall which completely surrounds the said second cavity on the side) (Page 4, Para 2, Fig, 1a and 1b). It is clear from figures 1a and 1b that the inner sidewall is in the shape of a cylinder and the outer sidewall is in the shape of a cylindrical sleeve surrounding the inner sidewall (the second cavity has the shape of a cylinder or another shape that is rotationally symmetrical in relation to said axis (x), and the said first cavity has the shape of a cylindrical sleeve or a shape derived therefrom) (Fig. 1a, 1b).

Nash and Reichinger are analogous art because they both teach about capsules which are activated by pressure located in beverage cans. Therefore, it would have

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been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the compartment filled with flavor and the inner sidewall of Reichinger into the first compartment of the capsule of Nash to provide a capsule with the advantage of being able to provide a flavor to the beverage wherein two products remain separate until the moment the customer wishes to consume the mixture which ensures that the mixture is fresh.

Given that Nash discloses that the capsules are inserted in containers the can is dosed with liquid nitrogen and the lid is affixed and sealed, the cans have been previously filled with beverage (C6/L39-45; C7/L23-26), the capsule is used to create a head on a beverage such as beer (C1/L4-7), the interior of the capsule will be pressurized by gas in the headspace above the liquid and the trapped gas is able to exit the capsule when the container is opened and the pressure in the container drops (C2/L26-33) and given that Reichinger discloses that his capsule is precharged to a pressure above atmospheric and inserted into the container and the container is filled with a liquid (Page 2, Para3), it is the examiner's position that modified Nash discloses use of the capsule wherein the second cavity is filled with the liquid substance, the open container is filled with liquid, the capsule insert is introduced into the container after the liquid is filled into the container and the liquid container is sealed such that overpressure develops compared to the ambient pressure after the liquid container is sealed.

Given that Nash discloses that the capsules are inserted in containers the can is dosed with liquid nitrogen which pressurizes the can after it is sealed (i.e. wherein pressure which causes said overpressure to develop within the liquid container after

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sealing, is admitted to the gas space above the liquid in the liquid container) (C3/L64-67), it is the examiner's position that the pressure which causes the overpressure to develop within the liquid container after sealing, is admitted into the gas space above the liquid in the liquid container.

Given that the liquid in modified Nash is beer (carbonated beverage) (C1/L4-7) and the substance stored in modified Nash is a flavor compound, it is the examiner's position that the liquid is beer and the substance stored separately is an aroma compound. Nash further discloses that the can is dosed with liquid nitrogen (i.e. filled with the addition of liquid nitrogen) (C3/L64-67).

15. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nash et al. (US 5,714,186), in view of Wright et al. (US 5,705,209).

Regarding claims 15 and 17, Nash discloses all of the claim limitations as set forth above. It is noted that the reference teaches a capsule with a bottom (i.e. bottom part) and a top (i.e. cover part) and a weight (Fig. 1 and 2). Given that the top and bottom of the capsule of Nash are a cover part and a bottom part, it is the examiner's position that the cover part and bottom part comprise all said sidewalls (i.e. at least one of said cover part and said bottom part has all the said sidewalls of the insert).

Nash does not disclose that the bottom part and the top part are connected to one another via snap connections, frictionally engaged connections or weak bonded connections or that the top and bottom of the capsule snappingly engage each other or extend around structures arranged there during connection.

Wright discloses an insert for a beverage container (C3/L5-10) having a top part and a bottom part which snappingly engage each other (Fig. 4).

Nash and Wright are analogous art because they both teach about inserts for a beverage container. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the snapping engagement design to connect the top and bottom portion of the capsule of Nash to provide a capsule that can be opened and closed easily so that components (such as the weight) can be easily placed inside the capsule.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES YAGER whose telephone number is (571)270-3880. The examiner can normally be reached on Mon - Fri, 7:30am-5pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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JY 6/15/09

/Rena L. Dye/
Supervisory Patent Examiner, Art Unit 1794